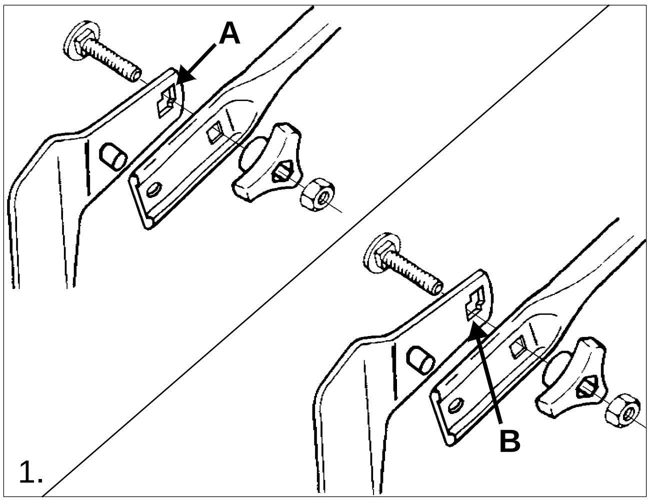


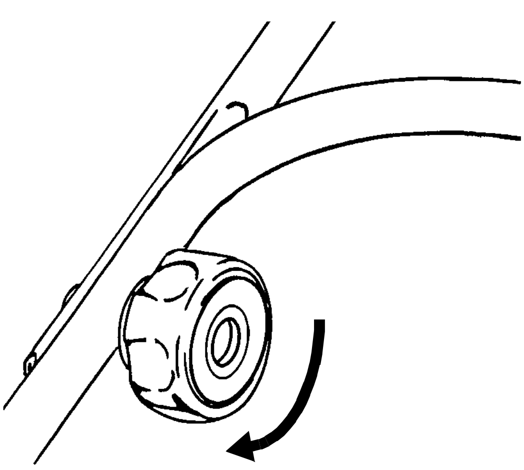
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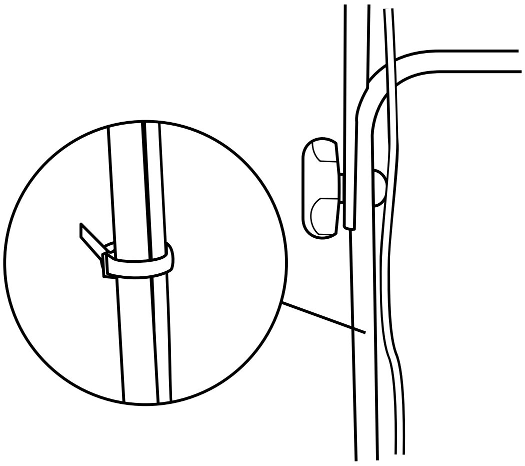
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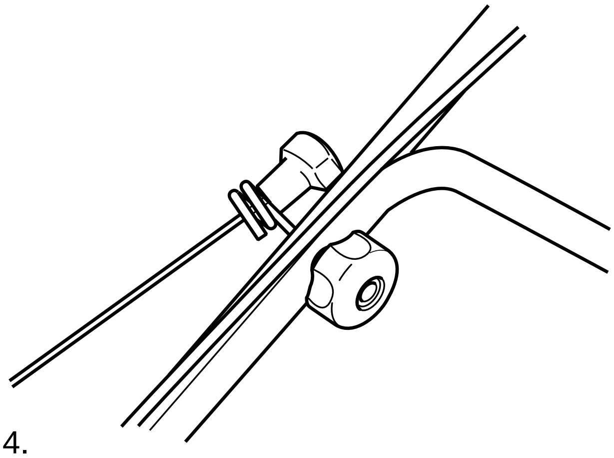
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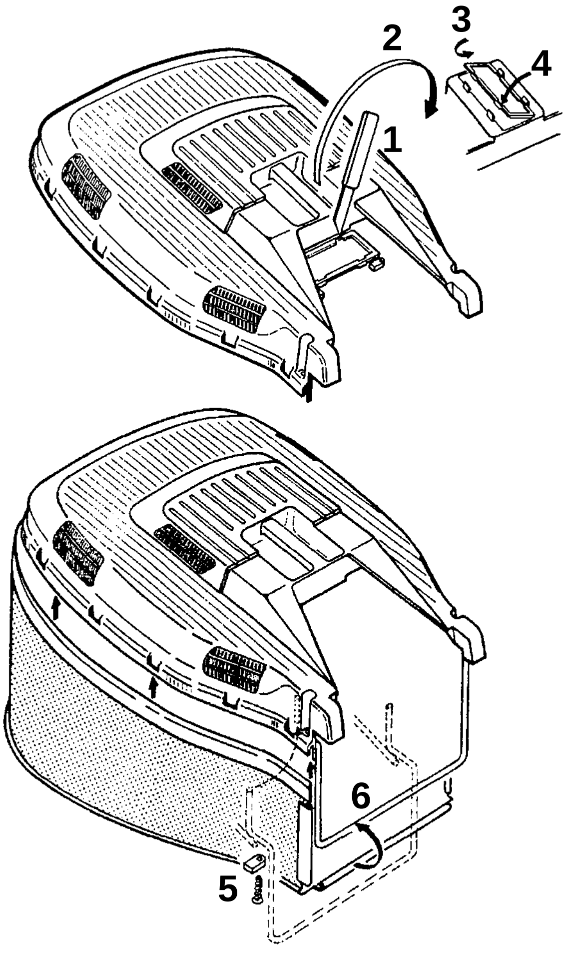
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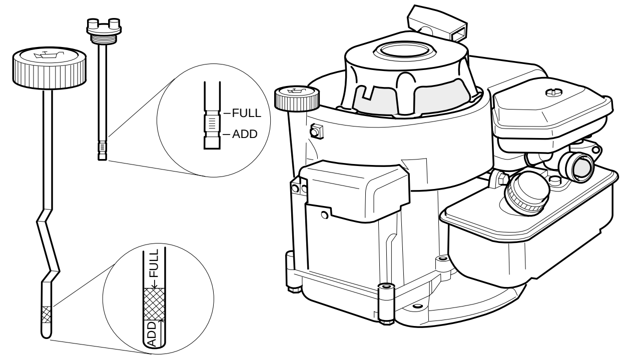
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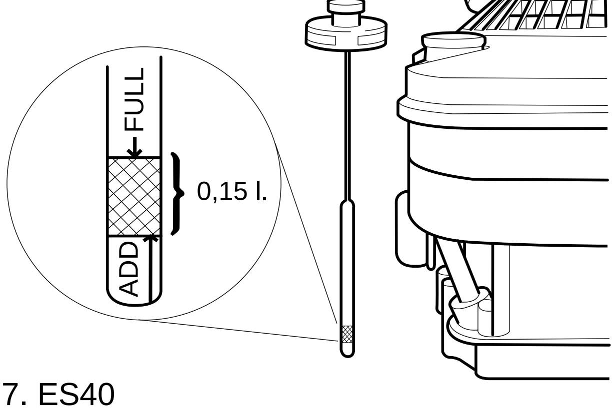
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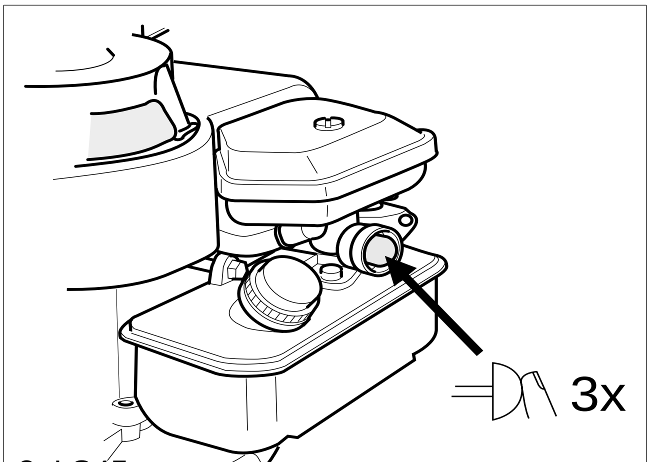
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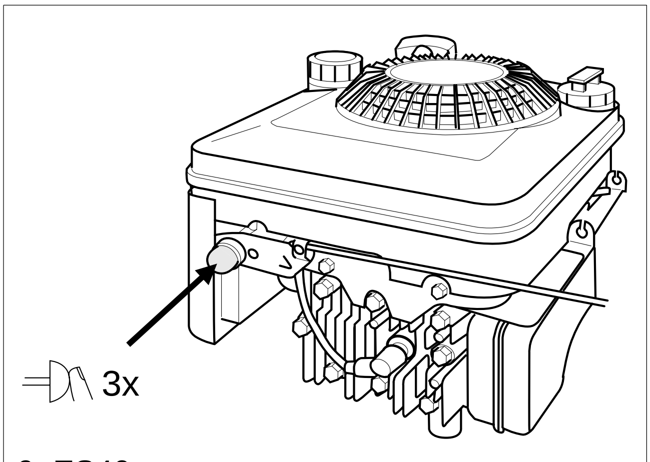
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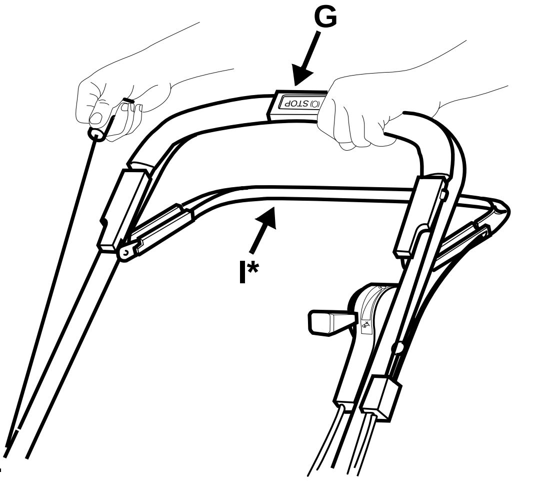
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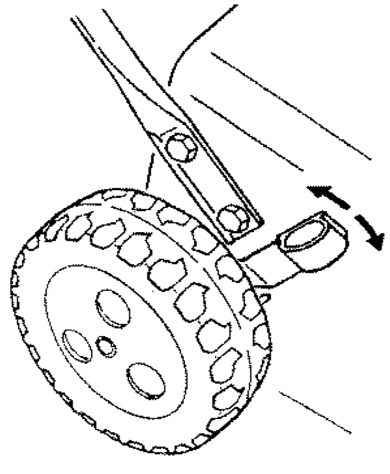
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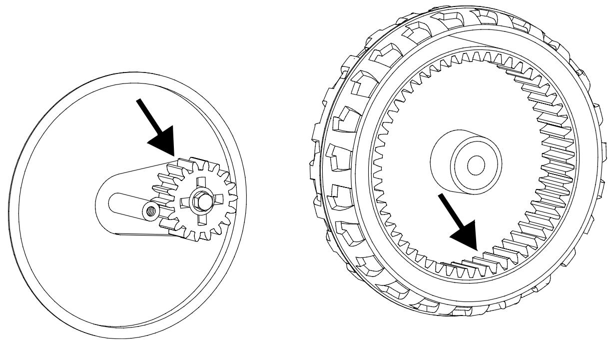
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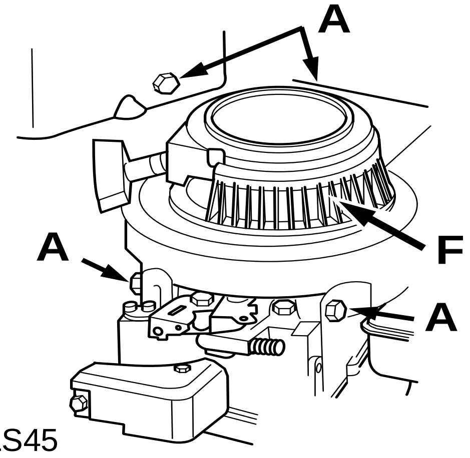
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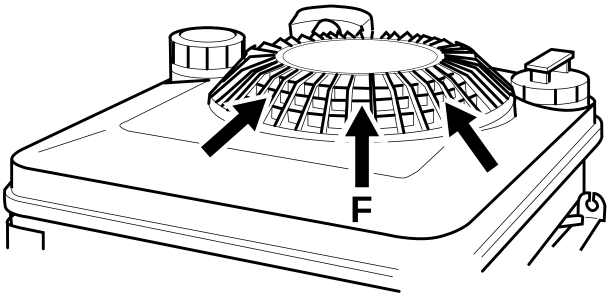
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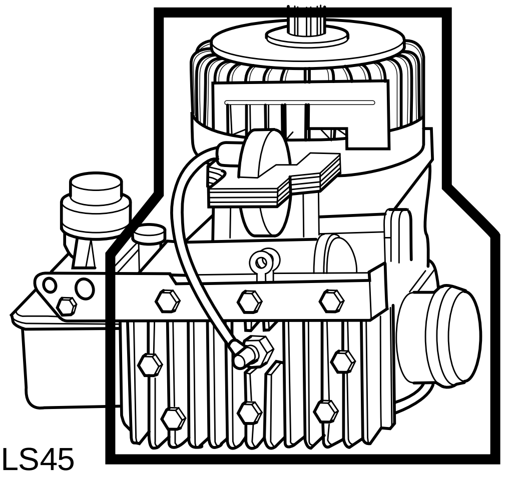
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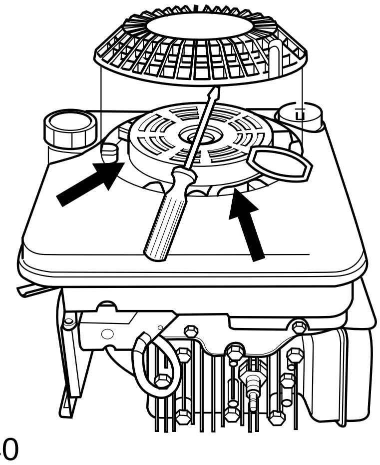
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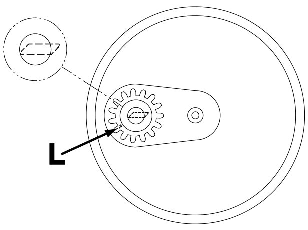
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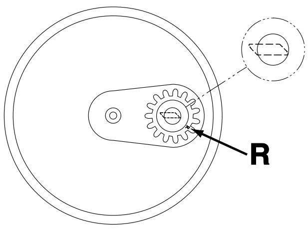
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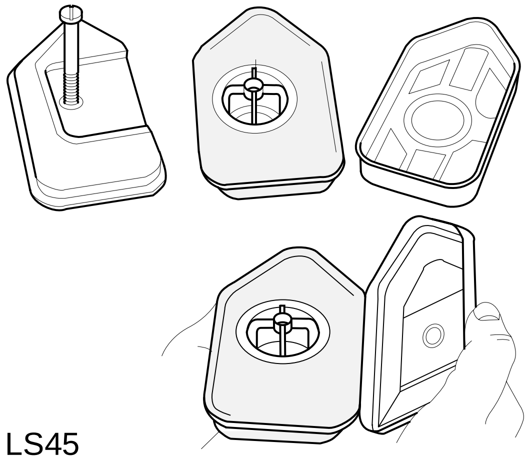
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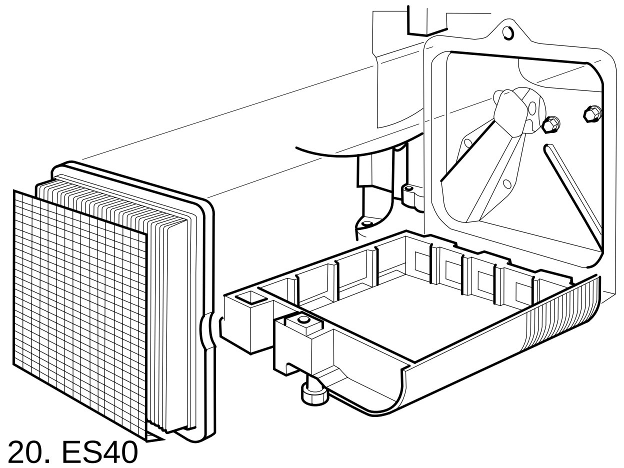
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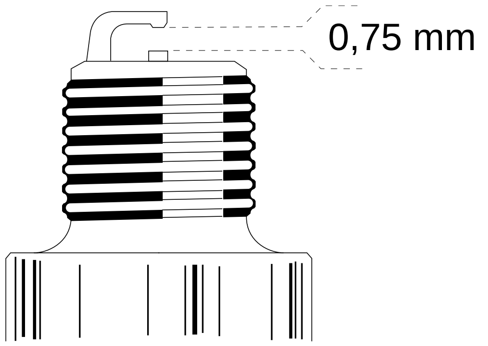
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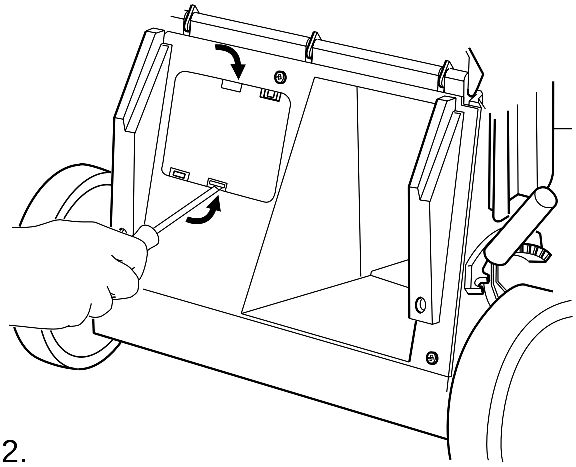
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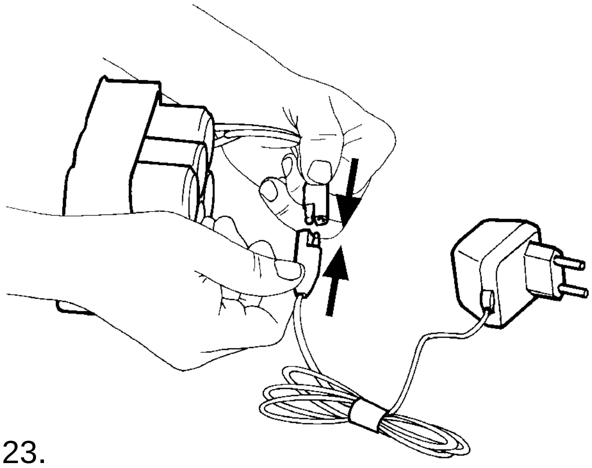
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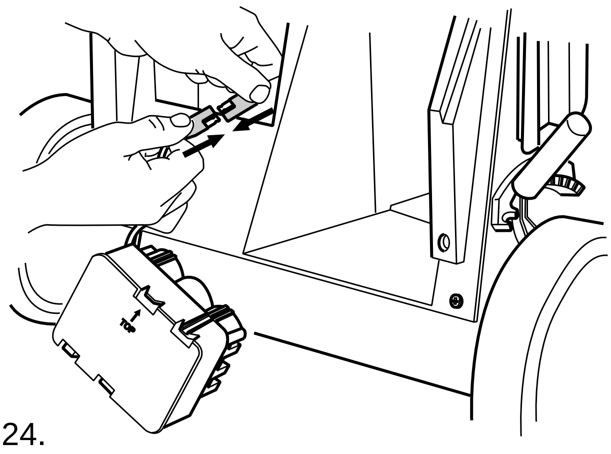
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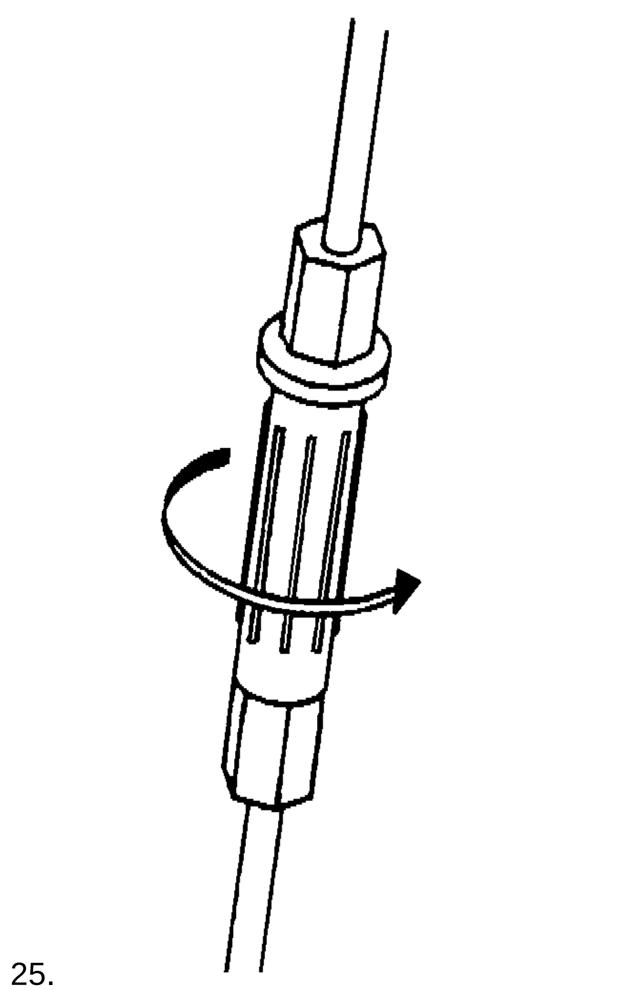
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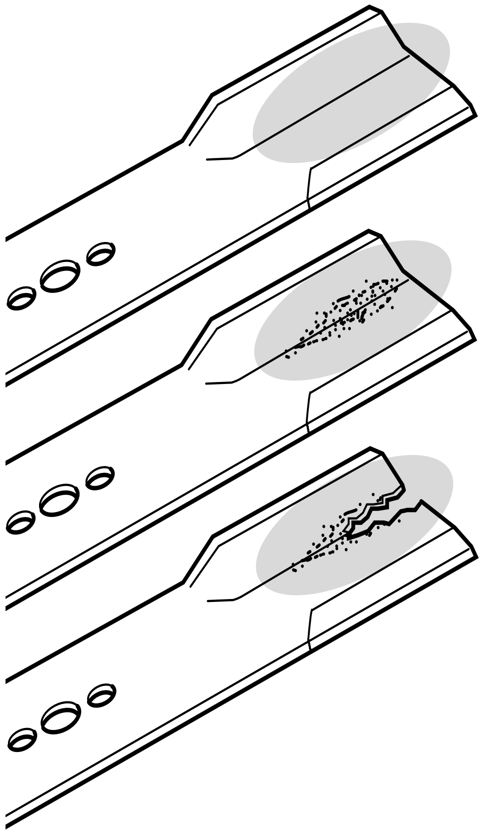
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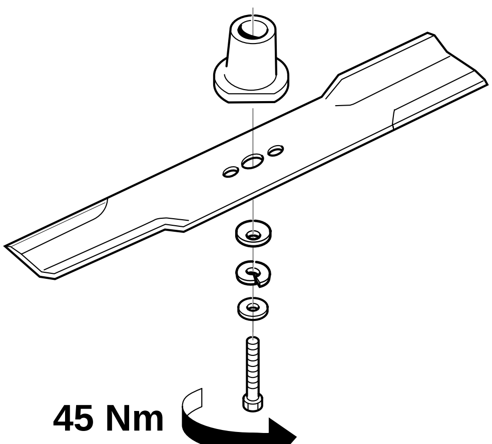
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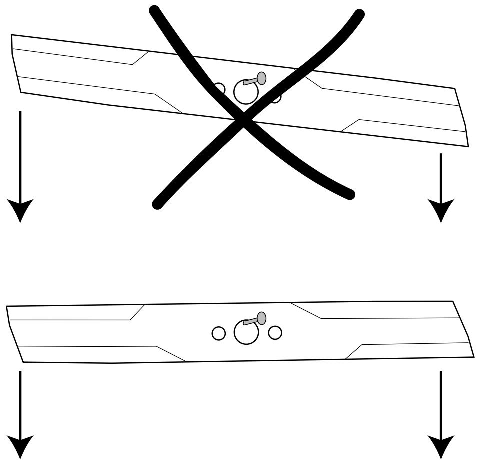
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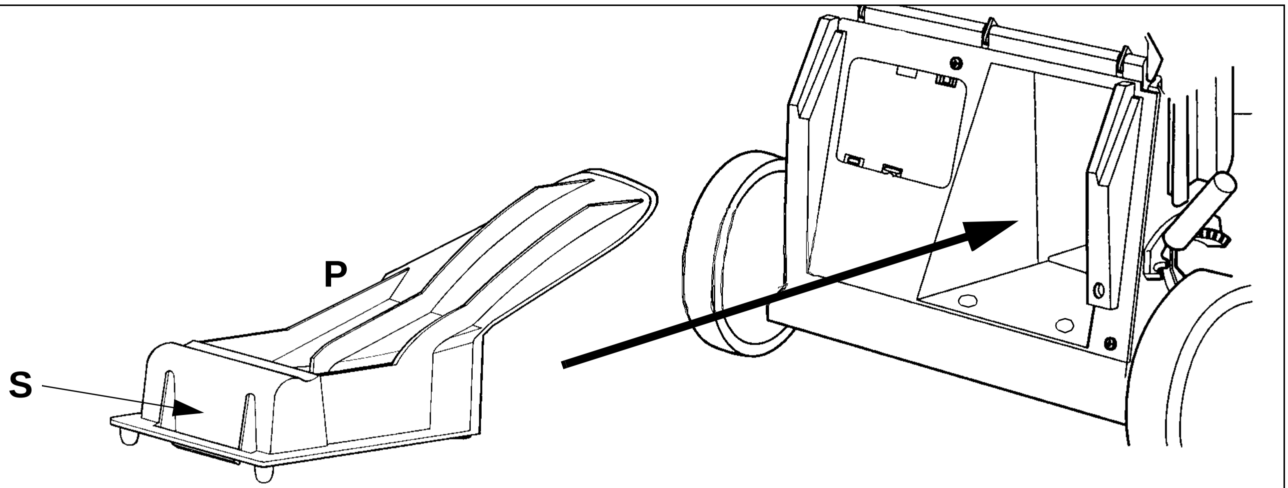
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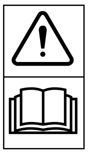


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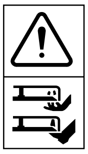
SYMBOLS

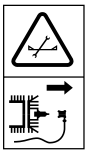
The following symbols are displayed on the machine in order to remind you about the safety precautions and attention necessary when using the machine.

The symbols mean:


Warning! Read the Instruction Book and Safety Manual before using the machine.


Warning! Keep spectators away. Beware of objects being flung out.


Warning! Do not put hands or feet under the cover of the machine when it is running.

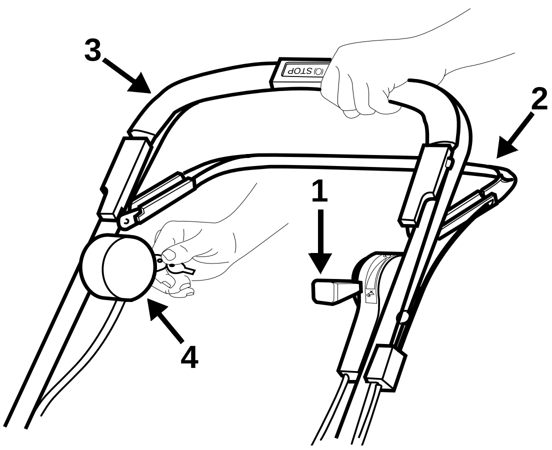

Warning! Before starting any repair work, remove the spark plug cable from the spark plugs.

IMPORTANT

Equipment marked with an asterisk (*) is included as standard equipment only for certain models or specific country versions.

Certain models do not have a throttle. The motor speed is set for optimal function and minimal exhaust emissions.

INTRODUCTION



1. Throttle (*)
2. Coupling clamp (*)
3. Start/Stop clamp
4. Electric starting facility (*)

ASSEMBLING

HANDLEBAR

Fold up the handle. By tightly screwing the lower part of the handle into the steering sockets' lower or upper holes (A or B), the steering height can be adapted to suit the operator (fig. 1).

Tighten the locking knobs to fix the upper part of the handle (fig. 2).

Finally secure the cables to the handle tube by using the cable ties (fig. 3).

EYELET FOR STARTER HANDLE

Attach the starter handle to the eyelet on the steering handle (fig. 4).

BATTERY (*)

Electrolyte in the battery is toxic and corrosive. It can cause serious corrosion damage etc. Avoid all contact with skin, eyes and clothing.

Before starting the mower the first time, you should charge the battery for 24 hours. Refer also to the section titled "MAINTENANCE, BATTERY".

Insert the starter key into the ignition lock.

USING THE MOWER

GENERAL

Your new lawn mower combines two different functions in the same machine:

1. "MULTICLIP"

When delivered, the machine is equipped with a plug (P) mounted in the grass evacuation opening (fig. 29). The machine can be used for "Multiclip", i.e. when cutting the grass is finely chopped by the blade. The grass is then spread into the lawn where it decomposes. In this way, nutrients are put back into the lawn.

To remove the plug, press in the catch (S). When remounting the plug, make sure that both the pins are pressed down into the holes, so that the plug snaps into place.

2. COLLECTION

Assemble the enclosed grass collector (fig. 5). Open the cover, remove the plug and this time hook the collector in place onto the back of the machine.

During cutting, the grass is collected in the collector. Empty the grass on the compost heap or spread it out on the flower bead as fertilizer. The machine is also excellent for collecting leaves in the autumn.

BEFORE STARTING

FILL THE CRANKCASE WITH OIL

The lawn mower is delivered without any oil in the motor crankcase. The crankcase must, therefore, be filled with oil before the motor is started the first time.

Remove the oil dipstick (fig. 6, 7). Fill the engine's crankcase with 0.6 litres of good quality oil (service class SE, SF or SG) Use SAE 30 or SAE 10W-30 oil.

Slowly fill up to the “FULL/MAX” mark. Do not fill with too much oil.

CHECKING THE OIL LEVEL

Check before using the machine that the oil level is between “FULL/MAX” and “ADD/MIN” on the dipstick.

Remove and dry the dipstick (fig. 6, 7). Slide it down completely and tighten it. Unscrew and pull it up again. Read-off. If the oil level is low, fill with oil up to the “FULL/MAX” mark.

FILL UP THE PETROL TANK

Fill with petrol before starting the motor. Never remove the filler cap or fill or top up with petrol while the motor is running or still warm.

Never fill the fuel tank completely full but allow a little room for the petrol to expand.

Always use pure unleaded petrol. You must never use 2-stroke petrol mixed with oil.

Note that you should always remember that petrol is a perishable commodity. Never buy more petrol than what you can use up in 30 days.

STARTING THE ENGINE

1. Place the lawn mower on flat, firm ground. Do not start in high grass.
2. Make sure the spark plug lead is connected to the spark plug.
3. Move the throttle control (*) to the full throttle position.
4. When starting a cold engine: Press down the primer fully three times (fig. 8, 9).

   When starting a warm engine the primer does not need to be used. If the engine stops due to a lack of petrol, refill and press down the primer three times.
5. Press in the Start/Stop-loop **G** against the steering. Note that the Start/Stop loop **G** must be kept pressed-in to prevent the engine from stopping (fig. 10).

6a **Manual starting:**
Grasp the starter handle and start the engine by pulling briskly on the starter handle.

6b **Electric starting facility (*):**
Start the engine by turning the starter key clockwise. Release the key as soon as the engine starts. Always make short attempts at starting to prevent discharging the battery.

To facilitate starting of the engine - press down the handlebar so that the front wheels lift slightly from the ground. Do not start in tall grass.

7. To achieve the best cutting results, you should always run the engine at full-speed.

Keep hands and feet well away from the rotating blade(s). Never put your hand or foot under the blade casing or in the grass evacuation unit while the motor is running.

STOP OF ENGINE

The motor may be very warm immediately after it is shut off. Do not touch the silencer, cylinder or cooling flanges as it can cause burns and injury.

1. Release Start/Stop-loop **G** (fig. 10) to stop the engine. This loop must not be disengaged (e.g. through fixing it in the depressed position against the steering), as the engine cannot be stopped.

2. If the lawn mower is left unattended to, remove the lead from the spark plug. Also remove the starter key (*).

If the start/stop loop no longer works, stop the engine by removing the lead from the spark plug. Immediately take the lawn mower to an authorised workshop for repairs.

REAR WHEEL DRIVE (*)

Engage the drive by pressing coupling clamp **I** against the steering handle. Disengage the drive by releasing coupling clamp **I** (fig. 10).

CUTTING HEIGHT

Shut off the motor before adjusting the cutting height.

Do not set the cutting height so low that the blade/blades can hit uneven ground.

The mower is fitted with a single lever control for adjusting the cutting height. Pull the lever outwards and adjust the cutting height to the position which is most suitable for your lawn (fig. 11).

NOTE! When the machine is used for "Multiclip", the two lowest cutting heights must not be used. The "Multiclip" function does not work if the grass is cut too short.

MAINTENANCE

Neither the motor nor the lawn mower may be serviced before the ignition cable is removed from the spark plug.

Stop the motor and remove the spark plug cable if the mower is to be lifted, e.g. with transportation.

If the lawn mower needs to be tilted it should be tilted so that the spark plug face upwards. Tilt the lawn mower when the fuel tank is empty.

CLEANING

After each time it is used the mower should be cleaned. This is particularly important on the underside of the mower casing. Wash out with the garden hose. The mower will then last longer and function better. Note! High pressure washing units should not be used.

If grass has dried on to the cutterhead casing it can be removed by scraping. If necessary, give the underside a touch of paint to prevent rusting.

Clean the silencer and the surrounding area regularly to remove grass, dirt and flammable waste products.

You should clean the inside of the drive wheels (*) once every season. Remove both wheels. Brush or blow-clean the gear and the wheels' gear ring from grass and dirt. Refit the wheels (fig. 12).

PROTECTIVE GRILLE

Clean the protective grille **F** to remove any grass and dirt after each time the machine is used to prevent the engine from becoming damaged as a result of overheating (fig. 13, 14).

COOLING SYSTEM

The engine is air-cooled. Grass and dirt can easily clog the cooling system and damage the engine. The cooling system should be cleaned at least once a season or after every 100 hours of operation. Clean more often if you mow in dry grass.

Briggs & Stratton model. LS45:
Remove the three screws **A** (fig. 13) and lift away the fan housing. Clean the area inside the line (fig. 15).

On LS45 engines, the screws **A** can be more easily reached if the engine cover is removed first.

Briggs & Stratton model. ES40:
Remove the protective grille and clean the marked area (fig. 16).

LUBRICATING THE DRIVESHAFT (*)

You should grease the key on the driveshaft once every season. Remove the wheel (hub cap, screw and washer). Then remove the E-circlip and washer to enable the gear to be removed from the shaft. Grease the key with universal grease.

Refit the key (different key fitments on right- and left-hand sides, see fig. 17, 18). Install the gear so that the L mark will be facing outwards on the left-hand side, and the R mark facing outwards on the right-hand side (mower viewed from behind).

CHANGING OIL

Replace the oil when the engine is warm and the fuel tank is empty. Take care while draining as the oil is hot, this is to prevent burns.

Change the oil the first time after 5 hours of operation, and subsequently after every 50 hours of operation or once a season. Remove the dip stick, tilt the mower and let the oil run out into a container.Be careful not to let any oil run on to the grass.

Fill with new oil: use oil of SAE 30 or SAE 10W-30 quality. The crankcase holds approx. 0.6 litre. Fill until the oil reaches the “FULL/MAX” mark on the dip stick.

AIR FILTER

A dirty and blocked air filter reduces the engine output and increases engine wear.

Clean the filter every three months or after every 25 hours of use, which ever occurs first. More often if the lawn mower is used on dusty ground.

Briggs & Stratton model. LS45:
Carefully remove the air cleaner so that no dirt falls down into the carburettor (fig. 19). Take out the foam plastic filter element and wash it in liquid detergent and water. Dry the filter element. Pour a little oil on the filter element and squeeze it in. Refit the air cleaner.

Briggs & Stratton model. ES40:
Loosen the screw and fold down the cover of the air cleaner. Carefully remove the filter cartridge (fig. 20). Knock it against a flat surface. Replace the filter cartridge with a new one if it is still dirty.

SPARKING PLUG

Never remove the spark plug or the ignition lead when checking to see if there is any spark, always use an approved test instrument.

Clean the sparking plug regularly (every 100 hours running). Use a wire brush for cleaning and adjust the correct spark gap 0,75 mm (fig. 21).

Change the sparking plug if the electrodes are excessively burnt or if the plug is damaged. The recommendations of the engine manufacturers are as follows:

Champion J19LM (RJ19LM) or another equivalent spark plug ought to be used in Briggs & Stratton engines.

BATTERY (*)

Electrolyte in the battery is toxic and corrosive. It can cause serious corrosion damage etc. Avoid all contact with skin, eyes and clothing.

In normal use during the season, the battery is charged by the engine. If the engine cannot be started with the starter key, it may be because the battery is “dead”.

Remove the battery by releasing the battery assembly from the mower using a screwdriver (fig. 22). Connect the enclosed battery charger to the battery, and then connect the charger to a wall socket and charge for 24 hours (fig. 23).

After charging, connect the battery's contactor to the engine's contactor and reinstall the battery assembly (fig. 24).

Note! The battery charger must not be connected to the engine terminal. The engine cannot be started by using the charger as a source of power supply, and the charger will be damaged.

WINTER STORAGE

Remove the battery and store for the winter well-charged (see above) in a dry and cool place (between 0° C and +15° C). At least once during the winter storage period the battery should be maintenance-charged.

Before the start of the season the battery should be charged once again for 24 hours.

ADJUSTING THE CLUTCH CABLE (*)

Engage the drive by pressing coupling clamp **I** against the steering handle. Should the machine not start mowing after having operated the clutch bracket, the cable needs adjusting. For cable adjustment, see fig. 25.

CHANGING BLADES

Use protective gloves to prevent cuts when changing blades/knifeblades.

Check the blade system regularly. Pay special attention to the curved area behind the blade edge for signs of wear and tear (fig. 26). If the blade shows signs of damage, it should be replaced. A worn down blade creates imbalance and can damage the mower.

Always check the blade(s) after an impact. **First disconnect the ignition cable.** If the blade system has been damaged the defective parts must be changed. Always use genuine spare parts.

To change blades, loosen the blade bolt. Mount the new blade so that it sits in the same way as the old one and tighten the blade bolt (fig. 27). Tightening torque: 45 Nm.

When replacing the blade, the blade bolt should also be replaced.

The guarantee does not cover damage to the blade, blade holder or engine caused by running into obstacles.

When replacing the blade, the blade holder and blade bolt, always use original spare parts. Non-authentic spare parts could lead to the risk of personal injury or damage, even if they fit the machine.

SHARPENING OF THE BLADES

Sharpening of the blades must be done by wet method grinding, using a whetstone or a grindstone.

For the sake of safety, the blades should not be sharpened on an emery wheel. A very high temperature could cause the blade to become brittle.

Once the blade has been sharpened, it must then be balanced so as to avoid vibration damage (fig. 28).

STORAGE

WINTER STORAGE

Empty the fuel tank. Start the engine and let it run until it stops. The same petrol must not remain in the tank for more than one month.

Tip up the mower and screw out the sparking plug. Pour a teaspoon of engine oil in the sparking plug hole. Pull out the starting handle slowly so that the oil is distributed in the cylinder. Screw in the sparking plug.

Thoroughly clean the mower and store it indoors in a dry place.